AMENDMENT

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In the Claims:

Claims 1 to 47 (Canceled).

48. (Currently Amended) A method for configuring a medical carrier, the method comprising:

first providing an elongate body having at least one ~~common~~ shared electrical conductor; and

electrically coupling at least two separately identifiable effectors to ~~said~~ the at least one ~~common~~ shared electrical conductor, wherein ~~said~~ the at least two separately identifiable effectors are axially spaced apart along the length of the elongate body and each of the at least two separately identifiable effectors comprises an identifiable processor ~~comprising a chip comprising an analog-to-digital converter~~.

49. (Original) A method as in claim 48, wherein the providing step comprises providing the body coupled with a cardiac pacing lead.

50. (Original) A method as in claim 48, wherein the providing step comprises providing a body having at least two electrical conductors, each conductor disposed in a separate lumen along at least a portion of the body.

51. (Canceled)

52. (Previously Presented) A method as in claim 48, wherein said elongate body is an implantable lead.

Claims 53 to 58 (Canceled).

59. (Original) A method as in claim 48, wherein at least one of the effectors comprises both a sensor and an actuator.

60. (Original) A method as in claim 59, wherein the sensor is selected from the group consisting of pressure sensors, volume sensors, dimension sensors, temperature or thermal sensors, oxygen or carbon dioxide sensors, electrical conductivity sensors, electrical potential sensors, pH sensors, chemical sensors, flow rate sensors, optical sensors, acoustic sensors, hematocrit sensors and viscosity sensors.

61. (Original) A method as in claim 59, wherein the actuator performs a function selected from the group consisting of providing an electrical current or voltage, setting an electrical potential, heating a substance or area, inducing a pressure change, releasing or capturing a material, emitting light, emitting sonic or ultrasound energy and emitting radiation.

62. (Canceled).

63. (Currently Amended) A method as in claim ~~62~~ 48, wherein electrically coupling each of the at least one effector comprises coupling at least three leads to at least three conductors disposed in separate lumens of the body.

64. (Original) A method as in claim 63, wherein ground, power, and data leads on the effectors are connected to ground, power and data connectors in the body.

65. (Original) A method as in claim 48, further comprising encapsulating at least a portion of the body and the mounted effectors with an encapsulating material.

66. (Currently Amended) An improved method for configuring a medical carrier of the type including a plurality of actuators, wherein the improvement comprises first providing at least two separately identifiable actuators on a surface of an elongate body, wherein said actuators are axially spaced apart along the length of the body, and wherein the at least two actuators each comprise a transducer and an identifiable processor comprising a chip comprising an analog-to-digital converter, and then electrically coupling each of said separately identifiable actuators to ~~at least~~ one ~~common~~ shared conductor through a surface penetration of said surface of said body.

67. (Currently Amended) An improved method for configuring a medical carrier of the type including a plurality of systems, wherein the improvement comprises first providing separately identifiable systems, wherein at least one system comprises at least two effectors on a surface of an elongate body that each comprise a transducer and an identifiable processor comprising a

chip comprising an analog -to-digital converter, wherein said effectors are axially spaced apart along the length of the body, and then electrically coupling each of said at least two effectors to ~~at least~~ one ~~common~~ shared conductor through a surface penetration of said surface of said body.

68. (Original) A method as in claim 67, wherein each system comprises:
at least one sensor;
at least one actuator; and
an electronic circuit.

Claims 69 to 113 (Canceled).

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